ACUTE ALCOHOLIC MULTIPLE NEURITIS WITH PECULIAR CHANGES IN THE GASSERION GANGLION.*

By Dr. Charles W. Burr and Dr. Daniel J. McCarthy.

Abstract.

B. K., female, *aet.* thirty-seven, was admitted to the Philadelphia Hospital suffering with acute alcoholic multiple neuritis. She developed shortly after admission incontinence of urine and feces and died five weeks after admission, having suffered for three weeks with severe rspiratory disturbance without physical signs during life or pathological lesions post-mortem to account for it. At autopsy there was found widespread degeneration of both the central and peripheral nervous systems, of the pelvic and sacral plexuses, of the vagus and phrenic nerves, with hemorrhagic extravasations into the sheaths of the latter.

In the Gasserion ganglion besides the degeneration of the nervous fiber elements there was an extensive degeneration and at times complete degeneration of the ganglion cells; in some of the degenerated cells there was a calcareous infiltration completely filling up the capsule and having a peculiar crystalline character. There was also a proliferation of the nuclei of the stroma and an intense proliferation of the cells of the capsules of the ganglion cells, in some cases entirely filling up the capsules. The picture at first sight resembled the ganglion of a case of hydrophobia, but differed in the absence of any special congestion of the ganglion and the chronic character of the capsular cell proliferation as manifested in the presence of a more completely formed cell body. There was also a difference in the proliferation of the capsule cells outwardly into the stroma as well as into the cell body. This is not met with in hydrophobia. Even in the absence of any of these distinct changes the presence of degeneration in the peripheral nerves would be sufficient to distinguish these specimens from rabies, because demonstrable changes are never present in the peripheral nerves in rabies. The degeneration of the pelvic nerves explains the loss of bladder and rectal control, and are of importance in showing that not only these symptoms, but also the presence of amenorrhea and impotence occurring in the course of multiple

---

*Read before the American Neurological Association, June, 1901.

neuritis may be due to an involvement of the nerves having these functions under control.

If the assumption of Van Gehuchten and Nelis be correct, that the paralysis in rabies is due to the changes in the intervetrabral ganglion, it would perhaps be worth while to consider these ganglion changes as contributory to the peripheral nerve changes in the production of the peripheral and cranial nerve palsies.

DISCUSSION.

Dr. Knapp said that in his experience in a very considerable number of cases of multiple neuritis, especially the alcoholic forms, paralysis of the bladder and rectum was extremely rare. In most of the cases it seemed to him either that there had been some involvement of the cord as a result of the poisoning or that there was merely the involuntary discharge from the bladder and rectum in consquence of the polyneuritic psychosis.

Dr. Joseph Collins asked Dr. Burr, in view of the changes which had been described in the spinal cord, if there were any anemia. He thought probably no blood count had been made; if that were so then whether or not there were an apparent anemia, because the changes described in the spinal cord were very similar to those reported as occurring with anemia.

Dr. H. T. Patrick asked the experience of the members as to the frequency of incontinence of urine and feces in so-called multiple neuritis. It seemed to him a more proper name for cases such as this would be poisoning of the motor elements, including their peripheral projections. He had had a case in which the rectum and bladder were both paralyzed, and when this occurred he was inclined to change his diagnosis from multiple neuritis, but the marked improvement caused him to accept his original diagnosis.